

# Exhibit 4



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|---------------|-------------|-----------------------|---------------------|
| 77218,312     | 07/12/88    | HOLMBERG              |                     |

SILVERMAN, CASS, SINGER & WINBURN, LTD.  
105 WEST ADAMS STREET, 27TH FLOOR  
CHICAGO, IL 60603

| EXAMINER |              |
|----------|--------------|
| SAHSEY   |              |
| ART UNIT | PAPER NUMBER |
|          | 4            |

DATE MAILED: 03/31/89

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449                  | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474      | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-36 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-6, 8-17, 19-24, 26-35 are rejected.
5. ☒ Claims 7, 18, 25 and 36 are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with Informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections **MUST** be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Serial No. 218,312

-2-

Art Unit 325

Claims 30-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what article limitations are set forth by the steps of providing interconnecting means and removing the same; or even whether any further article limitations are intended. As to claim 30, lines 2-8, if the interconnection means a part of the device they should be positively recited. As to claim 30, lines 9-10, the structure of the article resulting from forming and then removing the outer guard ring is the same as that recited in the base claim contrary to 35 USC 112 which requires that a further limitation be positively set forth. Thus it does not appear that applicant is claiming that which he regards as his invention by the recitation of process steps set forth above in the article claim.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at

Serial No. 218,312

-3-

Art Unit 325

the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-6, 8-17, 19-24 and 26-35 are rejected under 35 U.S.C. 103 as being unpatentable over Tuan in view of <sup>Hynecek or</sup> Harrison and Mack et al. Tuan discloses an electro-static discharge protection network with inter-connecting resistance elements but does not teach means for removing the same at the completion of the device manufacture. Harrison teaches an external buffer network means to protect the device during manufacture and for supplying test currents. The circuits of Harrison are Hynecek removed at completion of the device. It would have been obvious at the time applicant's invention was made to a person of ordinary skill in the art to have provide an external buffer and test circuit as taught by Harrison or Hynecek in the device of Tuan for discharge protection which is separable by scribe lines to provide a more compact functional device. Shunt switching means for draining large current discharges via an external circuit pad are well known as shown by Mack et al. As to claims 5, 16, and 34, the pads are rectangular and thus have corner means equivalent to that claimed. As to claims 6, 17 and 35, pads are shown at the corners in Harrison; further, the particular location of the pads is obvious to enable a plurality of pads to be situated in spaced relationship.

Claims 7, 18, 25 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all

Serial No. 218,312

-4-

Art Unit 325

of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Simmons et al shows interconnection fuse means for temporarily providing device protection.

Any inquiry concerning this communication should be directed to K.J. Ramsey at telephone number 703-557-8311.

KJ Ramsey:Klw

3-29-89

(703) 557-8311

*Kenneth J. Ramsey*

KENNETH J. RAMSEY  
EXAMINER  
GROUP 320

TO SEPARATE, HOLD TOP AND BOTTOM EDGES, SNAP-APART AND CARD CARBON

5

| FORM PTO-892<br>(REV. 3-78)   |              | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE |                | SERIAL NO.<br>218,312    | GROUP/ART UNIT<br>325 | ATTACHMENT<br>TO<br>PAPER<br>NUMBER<br>4 |                            |              |
|---|--------------|--|----------------|--------------------------|-----------------------|--|----------------------------|--------------|
| NOTICE OF REFERENCES CITED  |              |  |                | APPLICANT(S)<br>Holmberg |                       |  |                            |              |
| U.S. PATENT DOCUMENTS   |              |  |                |                          |                       |  |                            |              |
|   | DOCUMENT NO. | DATE   | NAME           | CLASS                    | SUB-CLASS             | FILING DATE IF APPROPRIATE               |                            |              |
| A   | 4455739      | 6/1984   | Hynecet        | 437                      | 8 X                   |  |                            |              |
| B   | 4586242      | 5/1986   | Harrison       | 437                      | 8                     |  |                            |              |
| C   | 4714949      | 12/1987  | Simmons et al  | 357                      | 23.13                 |  |                            |              |
| D   | 4736271      | 4/1988   | Mack et al     | 357                      | 23.13                 |  |                            |              |
| E   | 4803536      | 2/1989   | Tuan           | 357                      | 23.13                 |  |                            |              |
| F   |              |  |                |                          |                       |  |                            |              |
| G   |              |  |                |                          |                       |  |                            |              |
| H   |              |  |                |                          |                       |  |                            |              |
| I   |              |  |                |                          |                       |  |                            |              |
| J   |              |  |                |                          |                       |  |                            |              |
| K   |              |  |                |                          |                       |  |                            |              |
| FOREIGN PATENT DOCUMENTS  |              |  |                |                          |                       |  |                            |              |
|   | DOCUMENT NO. | DATE   | COUNTRY        | NAME                     | CLASS                 | SUB-CLASS                                | PERTINENT<br>SHTS.<br>DWG. | PP.<br>SPEC. |
| L   |              |  |                |                          |                       |  |                            |              |
| M   |              |  |                |                          |                       |  |                            |              |
| N   |              |  |                |                          |                       |  |                            |              |
| O   |              |  |                |                          |                       |  |                            |              |
| P   |              |  |                |                          |                       |  |                            |              |
| Q   |              |  |                |                          |                       |  |                            |              |
| OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)   |              |  |                |                          |                       |  |                            |              |
| R   |              |  |                |                          |                       |  |                            |              |
| S   |              |  |                |                          |                       |  |                            |              |
| T   |              |  |                |                          |                       |  |                            |              |
| U   |              |  |                |                          |                       |  |                            |              |
| EXAMINER<br>K. J. Ramsey  |              |  | DATE<br>3/1989 |                          |                       |  |                            |              |
| * A copy of this reference is not being furnished with this office action.<br>(See Manual of Patent Examining Procedure, section 707.05 (a).) |              |  |                |                          |                       |  |                            |              |


**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|---------------|-------------|-----------------------|---------------------|
| 07/218,312    | 07/12/88    | HOLMBERG              | 5 ALPHA-16          |

 SILVERMAN, CASS, SINGER & WINBURN, LTD.  
 105 WEST ADAMS STREET, 27TH FLOOR  
 CHICAGO, IL 60603

|             |              |
|-------------|--------------|
| EXAMINER    |              |
| RAMSEY, JR. |              |
| ART UNIT    | PAPER NUMBER |
| 320         | 5            |

DATE MAILED: 11/06/89

**NOTICE OF ABANDONMENT**

This application is abandoned in view of:

1. ☒ Applicant's failure to respond to the Office letter, mailed 3/31/89.
2. ☐ Applicant's letter of express abandonment which is in compliance with 37 C.F.R. 1.138.
3. ☐ Applicant's failure to timely file the response received \_\_\_\_\_ within the period set in the Office letter.
4. ☐ Applicant's failure to pay the required issue fee within the statutory period of 3 months from the mailing date of \_\_\_\_\_ of the Notice of Allowance.
  - ☐ The issue fee was received on \_\_\_\_\_.
  - ☐ The issue fee has not been received in Allowed Files Branch as of \_\_\_\_\_.

In accordance with 35 U.S.C. 151, and under the provisions of 37 C.F.R. 1.316(b), applicant(s) may petition the Commissioner to accept the delayed payment of the issue fee if the delay in payment was unavoidable. The petition must be accompanied by the issue fee, unless it has been previously submitted, in the amount specified by 37 C.F.R. 1.17 (l), and a verified showing as to the causes of the delay.

If applicant(s) never received the Notice of Allowance, a petition for a new Notice of Allowance and withdrawal of the holding of abandonment may be appropriate in view of *Deigar Inc. v. Schuyler*, 172 U.S.P.Q. 513.
5. ☐ Applicant's failure to timely correct the drawings and/or submit new or substitute formal drawings by \_\_\_\_\_ as required in the last Office action.
  - ☐ The corrected and/or substitute drawings were received on \_\_\_\_\_.
6. ☐ The reason(s) below.

*Kenneth J. Ramsey*

 KENNETH J. RAMSEY  
 EXAMINER  
 GROUP 320



#6  
PATENT  
Attorney Docket No. 32972  
10/12/90

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Scott H. Holmberg

Group Art Unit: 325

Serial No. 07/218,312

Examiner: Kenneth J. Ramsey

Filed: July 12, 1988

For: M E T H O D O F  
MANUFACTURING FLAT  
PANEL BACKPLANES  
I N C L U D I N G  
E L E C T R O S T A T I C  
D I S C H A R G E P R E V E N T I O N  
A N D D I S P L A Y S M A D E  
T H E R E B Y

RECEIVED

JUL 12 1990

DEPUTY ASST. COMM.

CHANGE OF ADDRESS

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Sir:

In accordance with M.P.E.P. Section 601.03, please change  
the correspondence address in this application to

Leydig, Voit & Mayer  
One IBM Plaza, Suite 4600  
Chicago, Illinois 60611  
(312) 822-9666

Please additionally recognize:



In Re Application Of Scott H. Holmberg  
Serial No. 07/218,312

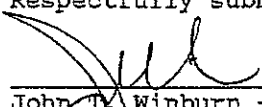
C. Frederick Leydig, Reg. 16196  
John P. Bundock, Reg. 16678  
Paul L. Ahern, Reg. 17020  
Berton S. Sheppard, Reg. 20922  
James B. Muskal, Reg. 22797  
Dennis R. Schlemmer, Reg. 24703  
Gordon R. Coons, Reg. 20821  
Michael C. Payden, Reg. 24037  
John E. Rosenquist, Reg. 26356  
John W. Kozak, Reg. 25117  
Charles S. Oslakovic, Reg. 27583  
Mark E. Phelps, Reg. 28461  
H. Michael Hartmann, Reg. 28423  
John D. Foster, Reg. 22943  
Bruce M. Gagala, Reg. 28844

Charles H. Mottier, Reg. 30874  
John Kilyk, Jr., Reg. 30763  
Robert F. Green, Reg. 27555  
John T. Winburn, Reg. 26822  
John B. Conklin, Reg. 30369  
John M. Belz, Reg. 30359  
Herbert C. Rose, Reg. 28946  
Jeffrey S. Ward, Reg. 32774  
Brett A. Hesterberg, Reg. 31837  
Keith B. Willhelm, Reg. 31442  
Paul J. Korniczky, Reg. 32849  
Christopher T. Griffith, Reg. 33392  
Jeffrey A. Wyand, Reg. 29458  
James C. Pintner, Reg. 33272  
Maurice U. Cahn, Reg. 30454  
William J. Bundren, Reg. 31712

as associate attorneys with full power of substitution to  
transact all business in the Patent Office in the above  
referenced matter.

Signed at Boca Raton in the County of Palm Beach and State  
of Florida, this 25th day of June, 1990.

Respectfully submitted,

  
\_\_\_\_\_  
John T. Winburn - Reg. No. 26822  
One of the Attorneys for Applicant  
Leydig, Voit & Mayer  
One IBM Plaza, Suite 4600  
Chicago, Illinois 60611

Boca Raton, Florida  
(407) 392-5332

In Re Application Of Scott H. Holmberg  
Serial No. 07/218,312

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited  
with the United States Postal Service as first class mail in  
an envelope addressed to: Commissioner of Patents and  
Trademarks, Washington, D.C. 20231, on June 25, 1990.

6/25/90

(date)

Julie M. Fitzsimmons



PATENT  
Attorney Docket No. 32972

#7/12  
MCA  
10/10/90

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Scott H. Holmberg

Group Art Unit: 325

Serial No. 07/218,312

Examiner: Kenneth J. Ramsey

Filed: July 12, 1988

For: M E T H O D O F  
MANUFACTURING FLAT  
PANEL BACKPLANES  
I N C L U D I N G  
E L E C T R O S T A T I C  
DISCHARGE PREVENTION  
AND DISPLAYS MADE  
THEREBY

RECEIVED  
JUL 12 1990  
DEPUTY ASST. COMM.

PROPOSED RESPONSE

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Sir:

In response to the Office Action of March 31, 1989, with a response due date of June 30, 1989 and in accordance with the PETITION FOR REVIVAL attached hereto, please amend the application as follows:

IN THE CLAIMS

Please amend claim 30 as follows:

30. (Amended) The backplane as defined in claim 28 including [interconnecting] substantially all of said row lines interconnected to one another and substantially all of said column lines interconnected to one another and [forming] an outer electrostatic discharge guard ring formed on said substrate coupled to said interconnected row and column lines via a resistance to provide protection from electrostatic

Copy  
Lit

a

In Re Application Of Scott H. Holmberg  
Serial No. 07/218,312

discharges between said row and column activation lines during manufacture of the displays[; and

removing said outer guard ring and row and column interconnections prior to completion of the display].

#### REMARKS

The Examiner rejected claims 30-34 under 35 U.S.C. Section 112 as indefinite. Claim 30 has been amended to positively recite the elements in lines 2-8 and to delete lines 9 and 10. The 35 U.S.C. Section 112 rejection now should be obviated.

Claims 1-6, 8-17, 19-24 and 26-35 were rejected under 35 U.S.C. Section 103 as obvious over Tuan in view of Hyncek or Harrison and Mack. Tuan in Fig. 5(a) is concerned with electrostatic discharge protection of an active matrix display. The resistive stripes 70 are not however removable as required by independent claims 1 and 19, as noted by the Examiner. The Examiner combines two semiconductor circuits in an attempt to supply such a teaching. Hyncek removes the interconnect 4 between devices 3, but does not provide row and column line connections or remove such connection if resistance 11 is taken to be such a connection. Likewise, Harrison is an integrated circuit, which has elements which could be separated at score line 270, but the elements are not an outer discharge ring connected as claimed. Tuan as noted in column 1 thereof, was familiar with various semiconductor circuits and chose to form the permanent non-removable resistive strips. It is not felt that a proper combination can be made from the teachings of Tuan, Harrison and Hyncek taken as a whole as required. Independent claims 1 and 19 and the claims dependent therefrom clearly should be allowable. Also, specifically dependent claims 8 and 26 add a second permanent inner guard ring, which dual ring is not suggested by any of the references alone or combined. Mack is recited to provide a teaching of such an inner guard ring as also claimed in independent claims 10 and 28. Mack again is a semiconductor type device and is not

- 2 -

32972.RSP

27

In Re Application Of Scott H. Holmberg  
Serial No. 07/218,312

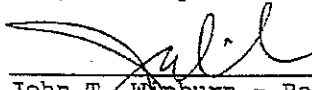
directed to an active matrix backplane as claimed. Further, the subsurface PN junctions 46 and/or 56 are external to the circuit and cannot be utilized in an active matrix backplane structure. Independent claims 10 and 28 clearly should be allowable as well as the claims dependent therefrom. Further, dependent claims 12 and 30 add the second outer guard ring which, as stated above, clearly is not disclosed or suggested by the references alone or in combination.

It is noted with appreciation that claims 7, 18, 25 and 36 are deemed to have allowable subject matter, however, the independent claims are felt to be allowable as above stated.

Claims 1-36 as now written clearly distinguish over the references of record, both structurally and functionally, and are in allowable form. The lacking teaching is not supplied or suggested by the references alone or in combination. Applicant respectfully requests withdrawal of the rejections and allowance of the claims.

Signed at Boca Raton in the County of Palm Beach and State of Florida, this 25th day of June, 1990.

Respectfully submitted,



John T. Winburn - Reg. No. 26822  
One of the Attorneys for Applicant  
Leydig, Voit & Mayer  
One IBM Plaza, Suite 4600  
Chicago, Illinois 60611

Boca Raton, Florida  
(407) 392-5332

In Re Application Of Scott H. Holmberg  
Serial No. 07/218,312

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited  
with the United States Postal Service as first class mail in  
an envelope addressed to: Commissioner of Patents and  
Trademarks, Washington, D.C. 20231, on June 25, 1990.

6/25/90

(date)

Julie M. Katzev



(620.00) 141 DAC #8

PATENT

Attorney Docket No. 32972

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Scott H. Holmberg

Group Art Unit: 325

Serial No. 07/218,312

Examiner: Kenneth J. Ramsey

Filed: July 12, 1988

For: M E T H O D O F  
MANUFACTURING FLAT  
PANEL BACKPLANES  
I N C L U D I N G  
E L E C T R O S T A T I C  
D I S C H A R G E P R E V E N T I O N  
A N D D I S P L A Y S M A D E  
T H E R E B Y

RECEIVED

JUL 12 1990

DEPUTY ASST. COMM.

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT  
ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Dear Sir:

1. This application became abandoned on June 30, 1989.
2. This petition is filed within one year of the date of abandonment.
3. This application became abandoned unintentionally.
4. Proposed response is attached.
5. Fee (37 CFR 1.17(m)), application status is other than small entity - fee \$620.00
6. Payment of fee:

Enclosed please find a check for \$620.00.

Charge Account 12-1216 for any additional fee required.

- 1 -

32972.PET

120 TL 07/09/90 07218312

1 141 620.00 CK

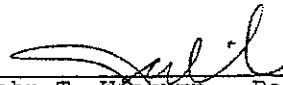
In Re Application Of Scott H. Holmberg  
Serial No. 07/218,312

7. Verification:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Date:

6/25/90

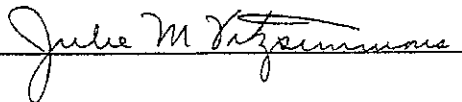
  
John T. Winburn - Reg. No. 26,822  
One of the Attorneys for Applicant  
Leydig, Voit & Mayer  
One IBM Plaza, Suite 4600  
Chicago, Illinois 60611

Boca Raton, Florida  
(407) 392-5332

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on June 25, 1990.

6/25/90  
(date)







UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JVN/eh.8

Paper No. 9

Leydig, Voit & Mayer  
One IBM Plaza  
Suite 4600  
Chicago, IL 60611

COPY MAILED

AUG 20 1990

In re Application of  
Scott H. Holmberg  
Serial No. 218,312  
Filed: July 12, 1988  
Attorney Docket No. ALPHA-18

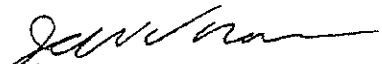
DEPUTY ASST. COMM.

ON PETITION

This is a decision on the petition under 37 CFR 1.137(b), filed June 28, 1990, to revive the above-identified application.

The petition is granted.

The application file is being forwarded to Group 320.

  
Jeffrey V. Nase  
Supervisory Petitions Examiner  
Office of the Deputy Assistant  
Commissioner for Patents



PATENT  
Attorney Docket No. 32972

#10  
MCA  
10/10/90

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Application of:

Scott H. Holmberg

Group Art Unit: 325

Serial No. 07/218,312

Examiner: Kenneth J. Ramsey

Filed: July 12, 1988

For: M E T H O D O F  
MANUFACTURING FLAT  
PANEL BACKPLANES  
I N C L U D I N G  
E L E C T R O S T A T I C  
DISCHARGE PREVENTION  
AND DISPLAYS MADE  
THEREBY

RECEIVED  
SEP 06 1990  
GROUP 320

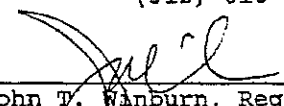
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**CHANGE OF ATTORNEY'S ADDRESS IN APPLICATION**

Please send all correspondence for this application as follows:

LEYDIG, VOIT & MAYER  
180 North Stetson Avenue  
Two Prudential Plaza - Suite 4900  
Chicago, Illinois 60601-6780

Please direct telephone calls to: (312) 616-5600  
and all facsimiles to: (312) 616-5700

  
John T. Winburn, Reg. No. 26,822  
One of the Attorneys for Applicant(s)  
LEYDIG, VOIT & MAYER  
180 North Stetson Avenue  
Two Prudential Plaza - Suite 4900  
Chicago, Illinois 60601-6780

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Julie M. Fitzsimmons

Date: August 30, 1990

  
Signature of person mailing paper



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| SERIAL NUMBER  | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO.   |
|--|-------------|-----------------------|-----------------------|
| 07/218,312   | 07/12/88    | HOLMBERG              | S ALPHA-18            |
|  |             |                       | EXAMINER              |
|  |             |                       | RAMSEY, K             |
|  |             |                       | ART UNIT PAPER NUMBER |
|  |             |                       | 325 11                |
| LEYDIG, VOIT & MAYER<br>180 NORTH STETSON AVENUE<br>TWO PRUDENTIAL PLAZA-SUITE 4900<br>CHICAGO, ILLINOIS 66601 |             |                       | DATE MAILED: 12/07/90 |

## NOTICE OF ALLOWABILITY

## PART I.

1. ☒ This communication is responsive to the amendment dated 6/28/90.
2. ☒ All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
3. ☒ The allowed claims are 1-36.
4. ☐ The drawings filed on \_\_\_\_\_ are acceptable.
5. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has [ ] been received. [ ] not been received. [ ] been filed in parent application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_.
6. ☐ Note the attached Examiner's Amendment.
7. ☐ Note the attached Examiner Interview Summary Record, PTOL-413.
8. ☐ Note the attached Examiner's Statement of Reasons for Allowance.
9. ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
10. ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

## PART II.

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.135(a).

1. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
2. ☒ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
  - a. ☐ Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attached hereto or to Paper No. \_\_\_\_\_. CORRECTION IS REQUIRED.
  - b. ☐ The proposed drawing correction filed on \_\_\_\_\_ has been approved by the examiner. CORRECTION IS REQUIRED.
  - c. ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT, CORRECTION IS REQUIRED.
  - d. ☒ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

## Attachments:

- Examiner's Amendment
- Examiner Interview Summary Record, PTOL-413
- Reasons for Allowance
- Notice of References Cited, PTO-892
- Information Disclosure Citation, PTO-1449
- Notice of Informal Application, PTO-152
- Notice re Patent Drawings, PTO-948
- Listing of Bonded Draftsmen
- Other

## NOTICE

ONLY OPTION 1.a) ON THE REPLY  
MAY BE USED TO CORRECT DRAWINGS  
IF THE APPLICATION WAS FILED  
AFTER JANUARY 1, 1985. 37 CFR  
1.85 (1097 O. G. 42).

*Kenneth J. Ramsey*  
KENNETH J. RAMSEY  
EXAMINER  
GROUP 320